H. MILLER.

SHEET-METAL CAN.

No. 192,446. Patented June 26, 1877.

Fig. 1.

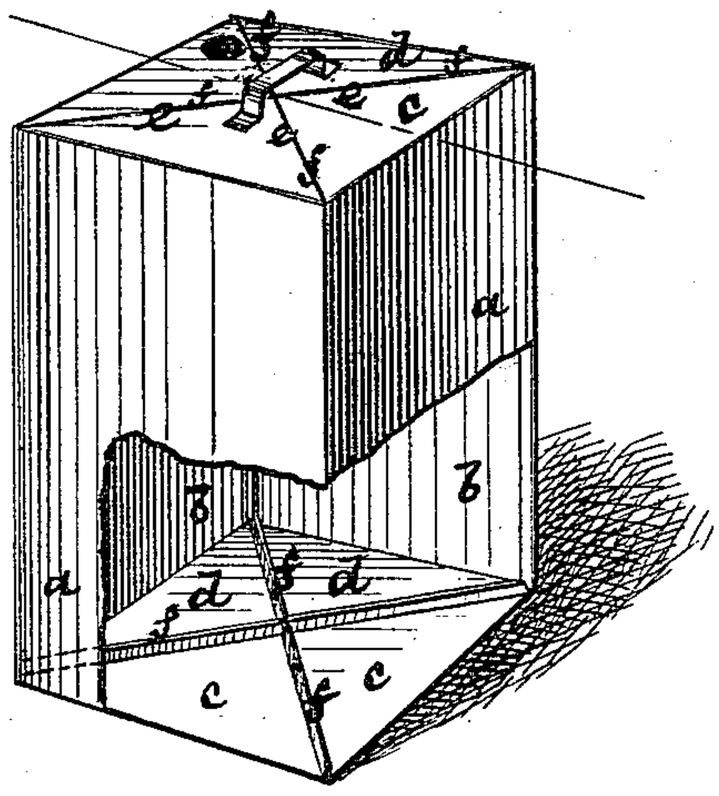

Fig. 2.

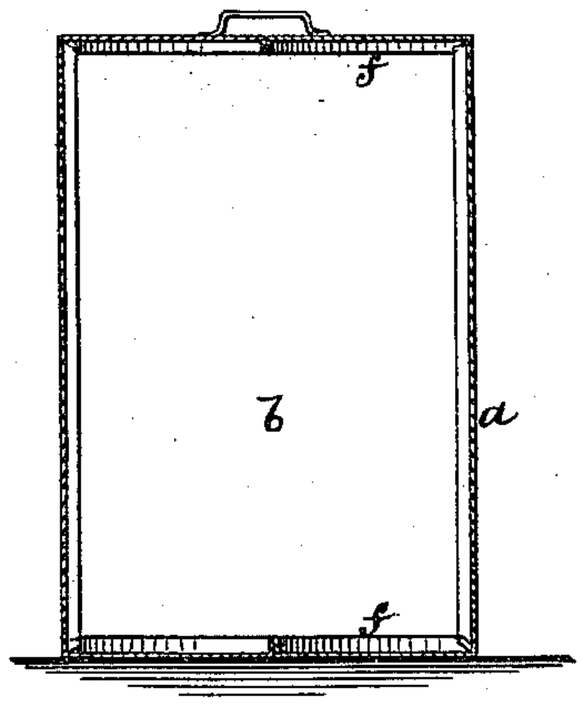

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Witnesses
John Becker
by Fred. Haynes

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UNITED STATES PATENT OFFICE.

HERMAN MILLER, OF NEW YORK, N. Y.

IMPROVEMENT IN SHEET-METAL CANS.

Specification forming part of Letters Patent No. **192,446**, dated June 26, 1877; application filed May 25, 1877.

To all whom it may concern:

Be it known that I, HERMAN MILLER, of the city and State of New York, have invented a new and useful Improvement in Sheet-Metal Cans, of which the following is a description, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to a sheet-metal can one or both heads of which are composed, either wholly or in part, of bent-over parts of the blank or blanks which form the body, the edges of the bent-over parts being united into seams, which cross the face of the heads. When the can has a nozzle or filling-opening formed in the center of either of its heads, then the bent-over parts of the body blank or blanks only partly form said head.

The invention consists in a sheet-metal can of such construction, having the bent-over parts of the blank or blanks which form its body, and which bent-over parts contribute to form either head or top or bottom of the can, or both, bent or constructed to turn inward, and made to unite into seams, which project inwardly relatively to the body of the can, thereby forming a can having a flush exterior surface as regards the seams on either of its heads formed out of the blank or blanks of which the body of the can is composed, thus protecting the crossing seam or seams of either head from outside injury, and, when applied to the bottom of the can, giving a broad or extended bearing-surface or rest for the can.

Figure 1 represents a partly-sectional or broken view, in perspective, of a four-sided metal can constructed in accordance with my invention; Fig. 2, a vertical section of the same; and Figs. 3, 4, 5, and 6 are diagrams, illustrating certain of various different constructions of the seam, which may be used in uniting the bent-over parts of the blank or blanks of which the body of the can is composed.

In the four-sided can here selected to illustrate the invention, which, however, is not restricted to a can of any particular number of sides or to a can made of any particular number of blanks, the body of the can is formed of two blanks, each of which is bent to form two right-angled sides, *a b*, although each side may be formed of a separate blank. These blanks, which are of a greater length than the sides of the can, are bent over, as at *c d*, to form the heads of the can, or either of them. Such bent-over portions, in a four-sided can constructed as described, are of a triangular form, and stand at right angles to the sides *a b*. The edges of such bent-over portions, whether of triangular form or otherwise, are bent or turned inward to form an inwardly-projecting seam or joint, *e f*, relatively to the body of the can, (Figs. 1, 2, and 3,) the margins *e* of such seam being of a simple hook form, and arranged to enter within the bent margins *f* of the adjacent bent-over portions of the can-body blank or blanks, and which latter margins are of U shape. This construction may apply to the several sides and bent-over portions of the body of the can, and the several inwardly-projecting flange joints or seams in either head of the can are hermetically sealed by running in solder from the outside of the heads.

Instead of said inwardly-projecting seam or seams, as applied to either head of the can, being of a plain hook and U form, as shown in Figs. 1, 2, and 3, they may be of a more or slight bent lip-shape, as shown in Fig. 4, or a joint formed of two inwardly-projecting plain or straight flanges, as shown in Fig. 5, may be used, or one of said flanges may be bent so that the other flange rests against it, as in the joint represented in Fig. 6, all of which forms of joint admit of being soldered from the exterior; but any other well-known or suitable form of joint may be employed, so long as the seams produced have an inwardly-projecting relation to the body of the can, extending either wholly or partly across either head of the latter, and are formed of or from bent-over portions of the blank or blanks of which the body of the can is composed, whereby not only stiffness is given to the heads, but a flush, or nearly flush, exterior surface, so far as the seam or seams are concerned, which seams, while adding to the stiffness or strength of the head or heads, are protected from outside injury, and an extended bearing or broad resting-surface is or may be obtained for the bottom of the can.

I am aware that before my invention cans

have been made in which the heads were formed by bending over the bodies and uniting the same by means of outwardly-projecting seams; but

I claim as my invention, as a new article of manufacture—

A sheet-metal can in which those portions of the body which are bent over to wholly or partly form either head of the can are united together by inwardly-projecting seams, substantially as described.

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